

## II. Rejection of Claims 8 to 12 and 14 Under 35 U.S.C. § 103(a)

Claims 8 to 12 and 14 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,215,785 ("Strasser et al.") in view of U.S. Patent No. 4,156,042 ("Hayman et al."). Applicants respectfully submit that the combination of Strasser et al. and Hayman et al. does not render obvious the present claims for at least the following reasons.

Claim 8 relates to a method for coating a hollow body. Claim 8 recites the steps of contacting a powder mixture with an inner surface of the hollow body to be coated and heating the powder mixture. Claim 8 recites that the powder mixture includes a metal donor powder, an inert filler powder and an activator powder, the activator powder including a metal halide. Claim 8 further recites that a mean particle size of the inert filler powder is approximately equal to a mean particle size of the metal donor powder. Claim 8 further recites that the mean particle size of the metal donor powder and the mean particle size of the inert filler powder are greater than 40  $\mu\text{m}$  and that a metal donor powder content is 10% to 25% by weight of the powder mixture.

Strasser et al. purportedly relate to a method for the powder pack coating of hollow bodies. See Abstract. The hollow bodies are stated to be coated with a powder mixture including 80 parts by weight  $\text{Al}_2\text{O}_3$  filler powder material and 40 parts by weight donator and activator powder material. See col. 3, lines 62 to 66. Accordingly, the  $\text{Al}_2\text{O}_3$  filler powder and activator powder materials amounts to  $40/(80 + 40)$  or 33% by weight of the powder mixture. Strasser et al. do not indicate what percentage of the weight of the powder mixture corresponds to the filler powder alone. The filler powder material is stated to be made from spherical powder particles with an average particle size of 150  $\mu\text{m}$ . See col. 3, lines 62 to 64. The weight donator material is stated to contain spherical powder particles having an average grain size smaller than 150  $\mu\text{m}$ . Strasser et al. do not disclose, or even suggest, a metal halide activator such as a metal halide of the donor metal, as admitted on page 2 of the Office Action. Further, as indicated above, nor do Strasser et al. disclose the metal donor powder content being 10% to 25% by weight of the powder mixture, as recited in claim 8.

Hayman et al. purportedly relate to a process for coating articles such as turbine blades in a pack-cementation process. See Abstract. Hayman et al. state that the coating material may be chosen from a group: aluminum, chromium, titanium, zirconium tantalum, niobium, yttrium, rare earth metals, boron and silicon together with a halide activator. See Abstract. However, Hayman et al. do not disclose, or even suggest, the metal

donor powder content being 10% to 25% by weight of the powder mixture, as recited by claim 8.

To establish prima facie obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In *re* Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In *re* Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In *re* Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In *re* Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Since the combination of Strasser et al. and Hayman et al. does not disclose, or even suggest, all of the limitations of claim 8, as more fully set forth above, it is respectfully submitted that the combination of Strasser et al. and Hayman et al. does not render obvious claim 8.

Moreover, it is respectfully submitted that the cases of *In re Fine, supra*, and *In re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Office Action's generalized assertions that it would have been obvious to modify or combine the references do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of *In re Fine* stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

**Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.**

*In re Fine*, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of *In re Jones* stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

**Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].**

*In re Jones*, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the present Office Action offers no evidence whatsoever, but only conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to modify or combine references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for modifying or combining the references to provide the claimed subject matter.

More recently, the Federal Circuit in the case of *In re Kotzab* has made plain that even if a claim concerns a "technologically simple concept" -- which is not the case here -- there still must be some finding as to the "specific understanding or principle within the knowledge of a skilled artisan" that would motivate a person having no knowledge of the claimed subject matter to "make the combination in the manner claimed," stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

*In re Kotzab*, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Again, it is believed that there have been no such findings.

Accordingly, there is no evidence that the references relied upon, whether taken alone, combined or modified, would provide the features and benefits of claim 8. It is therefore respectfully submitted that claim 8 is allowable for these reasons.

Notwithstanding the above, Applicants further submit that it would not have been obvious to one of ordinary skill in the art at the time the invention was made, as the Office Action alleges on page 3, to have selected the allegedly overlapping portion of the range allegedly disclosed by Strasser et al. As the Federal Circuit has stated, “[o]ne way for a patent applicant to rebut a prima facie case of obviousness is to make a showing of ‘unexpected results,’ *i.e.*, to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected.” *In re Soni*, 54 F.3d 746, 750, 34 U.S.P.Q.2d 1684, 1687 (Fed. Cir. 1995). Applicants respectfully submit that the requirement that the mean particle size of the inert filler powder be approximately equal to a mean particle size of the metal donor powder, as recited in claim 8, produces “unexpected results”, namely, it allows for the increase of the specific density without agglomeration of the powder mixture, for example, due to an excessively high metal donor powder content, and it also ensures that there is no premature depletion of the donor metal. See page 3, lines 34 to 37 and page 4, lines 1 to 9 of the Specification. Furthermore, a powder mixture of this type has sufficient flow properties and, in tight corners, gains access to internal cavities which are to be coated. See page 4, lines 7 to 9. Accordingly, Applicants respectfully submit that claim 8 is patentable over the combination of Strasser et al. and Hayman et al. Therefore, withdrawal of the 35 U.S.C. § 103(a) rejection and allowance of claim 8 are respectfully requested.

As for claims 9 to 14, which depend from claim 8 and therefore include all of the limitations of claim 8, Applicants respectfully submit that the combination of Strasser et al. and Hayman et al. does not render obvious these dependent claims for at least the same reasons provided above in support of the patentability of claim 8. *In re Fine, supra* (any dependent claim that depends from a non-obvious independent claim is non-obvious).

### **III. Rejection of Claim 13 Under 35 U.S.C. § 103(a)**

Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Strasser et al., Hayman et al. and U.S. Patent No. 5,989,733 (“Warnes et al.”).

Applicants respectfully submit that claim 13, which is depends from claim 8 and, therefore, includes all of the limitations of claim 8, is not rendered obvious for at least the same reasons provided above in support of the patentability of claim 8. *Id.*

**IV. Conclusion**

It is therefore respectfully submitted that all of the presently pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

KENYON & KENYON

Dated: May 5, 2003

By:

Richard L. Mayer  
Reg. No. 22,490

One Broadway  
New York, New York 10004  
(212) 425-7200

**CUSTOMER NO. 26646**



**26646**

PATENT TRADEMARK OFFICE